

**REDACTED  
FOR PUBLIC INSPECTION**

**Before the  
Federal Communications Commission  
Washington, DC 20554**

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In the Matter of )

Application by Verizon Virginia Inc., Verizon )  
Long Distance Virginia Inc., Verizon )  
Enterprise Solutions Virginia Inc., Verizon )  
Global Networks Inc., and Verizon Select )  
Services of Virginia Inc., for Authorization To )  
Provide In-Region, InterLATA Services in )  
Virginia )

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WC Docket No. 02-214

**SUPPLEMENTAL DECLARATION OF  
MICHAEL R. BARANOWSKI**

**I. QUALIFICATIONS**

1. My name is Michael R. Baranowski. I am a Managing Director of the Financial Consulting Division of FTI Consulting, Inc. My business address is 1201 Eye Street, NW, Suite 400, Washington, DC, 20005. In that position, I conduct economic and cost analysis for a variety of clients. Since 1996, I have been directly and continuously involved in interconnection agreement arbitrations and other network element rate proceedings before state public utility commissions. In that regard, I am intimately familiar with the cost models submitted by Verizon–Virginia and other incumbent local exchange carriers. I am submitting this supplemental declaration at the request of AT&T Corp. (“AT&T”).

2. The purpose of this supplemental declaration is to comment on the new Virginia UNE switch usage rates proposed by Verizon - Virginia on October 3, 2002. In

the remainder of this declaration I explain that the new rates offered by Verizon still result in an over-recovery of the forward-looking investment in switch equipment determined by the Virginia State Corporation Commission (“SCC”) and that Verizon has failed miserably in its attempts to bootstrap the undocumented and unsupportable replacement and growth discount percentage weighting. I explain that properly applied, the growth assumptions suggested by Verizon would result in substantial reductions in both usage and port switch UNE rates. I also explain that the growth assumptions advocated by Verizon in supporting the favorable discount weighting selected by the SCC are directly at odds with arguments made elsewhere by Verizon in the same ex parte filing regarding the prospects for growth of switching equipment usage. Substituting lower growth factors into the switch discount weighting calculations will yield further reductions in switch usage and port rates. Finally, I demonstrate that the Verizon’s criticisms of my switch price over-recovery analysis are invalid and should be disregarded by the Commission.

## **II. VERIZON-VIRGINIA’S NEW SWITCH USAGE RATES CONTINUE TO PRODUCE AN OVER-RECOVERY OF THE FORWARD-LOOKING SWITCH INVESTMENT DETERMINED BY THE VIRGINIA SCC.**

3. On October 3, 2002 Verizon announced that it is lowering its rates for unbundled switch usage in Virginia. Verizon proposes to change its Virginia originating unbundled switching rate from \$0.004129 to \$0.002643 and its terminating unbundled switching rates from \$0.002079 to \$0.001331. As shown elsewhere by AT&T, these new rates still do not meet FCC benchmarking test. Further, the new switch usage rates

offered by Verizon still produce an over-recovery of forward-looking switch investment determined by the Virginia SCC.

4. The new switching rates proposed by Verizon will produce a 22.6 percent over-recovery of forward-looking switching investment as determined by the Virginia SCC, even conservatively adopting Verizon's assertion, made in its September 26, 2002 ex parte, that investment for vertical feature hardware approximates a full 12 percent of switching investment.

5. Using the SCIS cost model submitted by Verizon, it is possible to determine the amount of switching usage investment (excluding return on investment, overhead, and other additional items) that Verizon will actually recover from its current Virginia switching usage rates. To this, Verizon's estimate of 12 percent for vertical features hardware investment can be added. The resulting number can then be compared to Verizon's actual switch investment to determine whether Verizon's Virginia switching usage rates recover the same amount as Verizon's actual initial switching usage investment.

6. Verizon's total forward-looking switching investment is [VERIZON PROPRIETARY] \*\*\*\*\* [VERIZON PROPRIETARY]. Reducing that amount by the portion of the switching investment that is attributable to non-usage port investment [VERIZON PROPRIETARY] \*\*\*\*\* [VERIZON PROPRIETARY] shows that Verizon's total investment in switching usage is [VERIZON PROPRIETARY] \*\*\*\*\* [VERIZON PROPRIETARY]. Verizon asserts that vertical feature hardware adds approximately 12

percent to the cost of a switch. Estimated feature investment based on Verizon's assertion is [VERIZON PROPRIETARY] \*\*\*\*\* [VERIZON PROPRIETARY], making the total investment to be recovered through switch usage [VERIZON PROPRIETARY] \*\*\*\*\* [VERIZON PROPRIETARY].

7. Verizon's new proposed switch rates will be used to recover this investment amount over the project life of the switch. Verizon is proposing an originating usage rate of \$0.002643 and a terminating usage rate of \$0.001331. Using Verizon's breakdown of originating and terminating minutes of use – [VERIZON PROPRIETARY] \*\*\*\*\*% originating and \*\*\*\*\*% terminating – yields a composite usage rate of \*\*\*\*\* [VERIZON PROPRIETARY]. Backing out an allowance for joint and common costs yields a composite rate of [VERIZON PROPRIETARY] \*\*\*\*\* [VERIZON PROPRIETARY] (before joint and common costs). However, that per-minute rate also recovers operating expenses, return on investment and other items. To determine the portion of Verizon's switching usage rate that recovers only initial switching usage investment, it is necessary to multiply the switching usage rate by the proportion of the Verizon annual cost factor representing depreciation, *i.e.*, return of initial investment. Depreciation represents [VERIZON PROPRIETARY] \*\*\*\*\* [VERIZON PROPRIETARY] percent of the Verizon switching annual cost factor.<sup>1</sup> Verizon's switching usage rate, therefore, includes [VERIZON PROPRIETARY] \*\*\*\*\* [VERIZON PROPRIETARY] to recover Verizon's initial switching usage investment. Verizon's cost model shows that

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<sup>1</sup> Verizon's switching annual cost factor is [VERIZON PROPRIETARY] \*\*\*\*\* [VERIZON PROPRIETARY]. The depreciation portion of that factor – based on a 17 year switch life and excluding investment loadings for EF&I, power, land, and buildings – is [VERIZON

Verizon will recover this rate over [VERIZON PROPRIETARY] \*\*\*\*\* [VERIZON PROPRIETARY] minutes per year,<sup>2</sup> *i.e.*, Verizon will recover [VERIZON PROPRIETARY] \*\*\*\*\* [VERIZON PROPRIETARY] per year over 17 years. Thus, Verizon will recover [VERIZON PROPRIETARY] \*\*\*\*\* [VERIZON PROPRIETARY] in switching investment costs over the amortized life of the switch. But that is 22.6 percent *higher* than Verizon's initial switching usage and feature investment of [VERIZON PROPRIETARY] \*\*\*\*\* [VERIZON PROPRIETARY]. This analysis is summarized in Table 1 below.

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PROPRIETARY] \*\*\*\*\* [VERIZON PROPRIETARY].

<sup>2</sup> This figures represents the annual minutes input by Verizon to the SCIS Model, less the percentage of non-conversation time reflected by Verizon in its development of switch usage rates. This assumption assumes that the number of minutes will not grow over time. In reality, minutes are likely to grow from year to year which would allow Verizon to spread its costs over additional minutes, thereby decreasing its switching rates. Indeed, the CAPCOST Plus model used by Verizon to compute annual cost factors assumes usage would grow over the study period. By assuming that rates will not grow over time, this analysis *understates* the amount that Verizon is over-recovering its switching usage rates.

**Table 1.**  
**Demonstration of Over-recovery of Usage Related Switching Investment Under**  
**Verizon's Newly Proposed Switch Usage Rates.**

Description	Amount [VERIZON PROPRIETARY]
Total SCIS Switching Investment	
Portion Assigned to Port	
Usage Related Switch Investment	
Feature Related Hardware	
Usage and Feature Related Switch Investment	
Average Verizon O&T Usage Rate (Before Joint & Common Cost)	
Depreciation Portion of ACF	
Annual Minutes	
Switch Life (Years)	
Usage Based Return of Investment:	
Percent of Recovered Amount to Investment	
Percent of Over-Recovery	[VERIZON PROPRIETARY]

**III. VERIZON-VIRGINIA'S EX PARTE CRITICISMS OF THE AT&T SWITCH PRICE OVER-RECOVERY ANALYSIS ARE INVALID, UNSUPPORTED AND DIRECTLY UNDERMINE OTHER ARGUMENTS MADE BY VERIZON ELSEWHERE IN ITS EX PARTE AND SHOULD BE DISREGARDED BY THE COMMISSION.**

8. In its September 26, 2002 ex parte, Verizon attempts to discredit AT&T's demonstration that the UNE switch rates in place in Virginia will result in a significant over-recovery of the forward-looking switching investment determined by Virginia SCC.

Verizon arguments can be condensed to the following four points:

- Given the regulatory construct, Verizon's UNE rates are likely to be reset every few years. Because of this, it is unrealistic to assume switch rates will remain constant over the expect life of the switch.
- The forward-looking switch investment used in the AT&T analysis is understated because it fails to include costs for engineering, furnishing and installing the switching equipment, the power costs Verizon incurs to operate central office switching equipment and the costs Verizon incurs for land and building investments required to house this equipment.

- The analysis does not provide for incremental investment to replace damaged or malfunctioning switch equipment and does not include the cost for vertical features hardware.
- AT&T fails to exclude from the Virginia switching usage rate certain amounts that are designed to recover expenses and not investment costs.
- AT&T assumes the number of minutes of use generated by Verizon's TELRIC study will remain constant over the 17 year life of the switch; in fact they are likely to decline.

9. Each of the criticisms leveled by Verizon, except for one, is without merit. The sole exception relates to the cost of vertical feature hardware costs. In preparing its over-recovery analysis, AT&T explained that the forward-looking switch investment assumed to be recovered by the usage rate does not include the incremental hardware investment required to provision certain vertical features. AT&T explained that the amount of the excluded hardware investment constitutes approximately 2 percent of total switch investment cost and, as such, is immaterial to the over-recovery analysis. Verizon in its ex parte disputes AT&T's position that the incremental switch feature hardware investment is immaterial and – without any supporting documentation – asserts that such cost typically comprise **[VERIZON PROPRIETARY] \*\*\*\*\* [VERIZON PROPRIETARY]** of total SCIS material switch investment. Even though Verizon provides no support, the restatement of the switch rate over-recovery analysis above adopts Verizon's asserted percentage. Verizon's only potentially valid criticism is thus moot.

10. Verizon's claim that the regulatory construct results in the resetting of UNE rates every few years, and that any analysis that looks beyond a three to four year time frame is therefore meaningless, contradicts Verizon's own cost study as well as the essence of TELRIC itself. Verizon's new position also suggests that a fundamental

change to the TELRIC costing methodology may be warranted under these circumstances.

11. The Verizon cost study reviewed by the Virginia SCC developed the return of and return on forward-looking investment over the projected life of each asset based on an anticipated level of usage over that life. This is consistent with the long run cost study principles dictated by TELRIC. It is Verizon's own cost study inputs and assumptions from the Virginia cost study that drive the recovery pattern reflected in the over-recovery analysis. In fact, a review of the CAPCOST Plus model used by Verizon in the Virginia SCC proceeding to develop annual cost factors shows that the inputs to that model for switch investment recovery actually assumed switch usage would *increase* over the first five years of the switching asset's life. Thus, AT&T's assumption that minutes would remain constant over the life of the switch is more conservative than the increased usage Verizon assumed when preparing its own cost study.

12. Verizon's argument that UNE rates are reset every few years is immaterial to the TELRIC cost analysis, which uses the best estimates available at the time to determine the anticipated number of usage units over which investment can be recovered over an asset's life. Indeed, the cost study submitted by Verizon in Virginia and reviewed by the Virginia SCC recognized the long run nature of the TELRIC analysis and properly assumed a nominal discount rate that provides for recovery of anticipated inflation over the projected life of the asset as well as for the cost of money itself. If the rates are to be reset every few years as Verizon suggests, the use of the nominal cost of capital as a discount rate would result in a double count of anticipated future inflation:



first as a component of the cost of capital and again in the inflated unit costs in the cost study four years hence. The appropriate correction, if rates are to be periodically reset as Verizon suggests, is not to cut off the long run TELRIC analysis after four years but rather use a real discount rate – i.e., net of inflation – to avoid double counting inflation.

13. Verizon's assertion that the AT&T over-recovery analysis is flawed because switch investment does not include engineering, furnishing and installing switch equipment, power costs or land and building costs suggests that Verizon both does not understand the over-recovery analysis and, more surprisingly, does not understand how its own cost studies are constructed.

14. In its cost study, Verizon provides for all the costs it now claims are excluded from AT&T's analysis through its CAPCOST Plus annual cost factor program. Cost for engineering, furnishing and installation ("EF&I"), power and land and buildings are reflected as additions to the CAPCOST Plus annual cost factors. The AT&T over-recovery analysis, by starting with the total annual cost factor that includes return of investment, return on investment, income taxes, EF&I, power, other operating and support expenses and land and building costs, and isolating only the depreciation component – before EF&I and other additives are applied – ensures that the portion of the switch rate applicable only to the switch investment produced by the SCIS model is used in the analysis. Thus this claim, as well as Verizon's later claim that AT&T failed to include certain amounts from the switch rate that are designed to recover expenses, is moot.

15. Verizon's last criticism is that AT&T erred by assuming the level of switching minutes supplied by Verizon would remain constant over the life of the switch. Verizon claims that because of the increasing use of wireless, cable modems and dedicated data services such as DSL, an assumption that switch usage will remain constant or grow over the next 17 years is questionable. As discussed previously, the assumption that switch usage will remain constant over the 17 year life of the switch is in fact *more* conservative than the switch usage assumption in Verizon's own cost study. The study upon which the switch usage rates were determined assume that usage would [VERIZON PROPRIETARY]

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\*\*\*\*\* [VERIZON PROPRIETARY]. Here again, Verizon's criticism is unfounded.

**IV. VERIZON'S EFFORTS TO JUSTIFY THE VIRGINIA COMMISSION'S USE OF A 54/46 REPLACEMENT/GROWTH SWITCH DISCOUNT WEIGHTING IS FLAWED. PROPER CALCULATION OF THE REPLACEMENT/GROWTH WEIGHTING WOULD PRODUCE A LARGE REDUCTION IN SWITCH PORT AND USAGE RATES IN VIRGINIA.**

16. In Attachment 3 to its September 26, 2002 ex parte submission, Verizon presents an analysis that purports to support the Virginia SCC selection of a 54%/46% replacement/growth weighting for switch discounts. The analysis, however, does not compute the relative proportion of the appropriate replacement and growth discount weightings, as Verizon would have the Commission to believe. Rather, the analysis computes the relative weighting of the switch investment *dollars* that would be generated by a computation that assumes 3 percent annual growth over the life of the switch.

Simply put (and rounding for added simplicity), 3 percent annual growth over a 17 year switch life at a 10.12 percent discount rate would produce a replacement/growth mix of approximately 80 percent replacement and 20 percent growth.<sup>3</sup> Verizon then assumes that growth equipment has a unit cost three times higher than the cost of replacement equipment. Verizon then multiplies the effective 80 percent replacement weighting by one and the 20 percent growth weighting by three. This would produce a cost relationship of 80 cost units for replacement and 60 cost units for growth, or approximately 57 percent replacement dollars and 43 percent growth dollars. The result of this analysis—a 57/43 split in new/growth investment *dollars*—obviously should not be used as the *input* to the analysis—the percentage mix in new/growth switching *capacity*.

17. As a threshold matter, Verizon's use of a three percent annual demand growth rate switches in defense of the SCC's use of a 54 percent replacement and 46 percent growth discount weighting contradicts directly Verizon's claim—asserted only six pages later in the same September 26 ex parte filing—that because of competition from wireless, cable modems and dedicated data services, it is unlikely that switch demand will even remain at current levels. At most, only one of these diametrically inconsistent assumptions about future anticipated growth can be right. Because the relative weighting of the replacement and growth discounts has such a dramatic impact on the forward-

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<sup>3</sup> The Verizon attachment includes an error that understates the present value of the replacement weighting and overstates the growth weighting. Specifically, although switches are typically sized to accommodate one year to eighteen months of future growth, the Verizon illustration begins weighting growth additions immediately upon placement of the switch.

looking switch rates (both usage and port), it is important that the right weighting be applied. It would be clear error to accept Verizon's assumptions that switch demand will grow in the context of switch discounts, yet will decline in the context of assessing the overall amount of investment recovery implicit in the proposed switching rates.

18. To put the impact on the relative weighting the replacement/growth discount into perspective, changing the weighting from the 54/46 mix adopted by the SCC to the 80/20 mix that results from proper application of a three percent growth assumption over the 17 year switch life would result in a 30 percent reduction in both the switch usage and port rates—i.e., approximately the reductions that Verizon announced on October 3, 2002.

19. Modifying the growth assumption downward to two percent annually over the switch life, however, would yield a 86/14 replacement/growth weighting and produce a 38 percent reduction in switch usage and port rates—i.e., deeper than what Verizon has announced.

20. Modifying the growth assumption downward to one percent annually over the switch life would yield a 93/7 replacement/growth weighting and produce a 46 percent reduction in switch usage and port rates—still deeper than what Verizon has announced.

21. Finally, assuming a zero percent growth rate – consistent with the position Verizon takes on the AT&T over-recovery analysis – would yield a 100/0 replacement/growth mix and produce a 55 percent reduction in switch usage and port

rates—i.e., yielding rates substantially less than the reduced rates that Verizon has announced.

## **V. CONCLUSION**

22. For the foregoing reasons, Verizon Virginia's UNE switch usage and port rates should be further reduced to reflect a correct application of the anticipated growth in switching demand in accordance with Verizon's most recent expectations relating to switch usage growth.

## **VERIFICATION PAGE**

I declare under penalty of perjury that the foregoing Declaration is true and correct.

/s/ Michael R. Baranowski

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Michael R. Baranowski

Executed on: October 9, 2002

Attachments 1 and 2 are  
Excel spreadsheets containing  
proprietary information subject to  
the protective order in this proceeding.